

IN THE CLAIMS:

Please AMEND the claims and ADD new claims as indicated below:

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8. (CURRENTLY AMENDED) An optical communication apparatus comprising:

optical modulating means for receiving an input light at an input port of the optical modulating means, and for modulating the received input light in accordance with a modulation signal to be transmitted; and

regulating means for regulating the intensity of light which is transmitted through an optical transmission line from said optical modulation means, wherein said regulating means is an optical attenuating means for attenuating the intensity of the input light entered to an before being received at the input port of said optical modulating means in accordance with the intensity of said modulation signal.

9. (CANCELED)

10. (CURRENTLY AMENDED) An optical communication apparatus comprising:

optical modulating means for modulating input light in accordance with a modulation signal to be transmitted, and for outputting the modulated light from an output port of the optical modulating means; and

regulating means for regulating the intensity of light which is transmitted through an optical transmission line from said optical modulation means, wherein said regulating means is an optical attenuating means, positioned downstream of the output port, for attenuating the intensity of the modulated light exit-after being output from an the output port of said optical modulating means in accordance with the intensity of said modulation signal.

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24. (CURRENTLY AMENDED) An optical communication apparatus comprising:
an optical modulator receiving input light at an input port of the optical modulator, and
modulating the received input light in accordance with a modulation signal to be transmitted;
and

a regulator regulating intensity of light which is transmitted through an optical transmission line from the optical modulator, wherein the regulator is an optical attenuator attenuating intensity of the input light entered to an before being received at input port of the optical modulator in accordance with intensity of the modulation signal.

25. (CURRENTLY AMENDED) An optical communication apparatus comprising:
an optical modulator modulating input light in accordance with a modulation signal to be transmitted, and outputting the modulated light from an output port of the optical modulator; and
a regulator regulating intensity of light which is transmitted through an optical transmission line from the optical modulator, wherein the regulator is an optical attenuator, positioned downstream of the output port, attenuating intensity of light exited after being output from an the output port of the optical modulator in accordance with intensity of the modulation signal.

26. (CURRENTLY AMENDED) An apparatus comprising:
an optical modulator receiving an input light and modulating an the received input light in

accordance with a modulation signal; and

an attenuator attenuating intensity of the input light before being received by the optical modulator in accordance with intensity of the modulation signal.

27. (PREVIOUSLY PRESENTED) An apparatus as in claim 26, wherein, when the intensity of the modulation signal is below a predetermined level, the attenuator attenuates the intensity of the input light so that ASE is not output from the modulator.

28. (PREVIOUSLY PRESENTED) An apparatus as in claim 26, wherein, when the intensity of the modulation signal is below a predetermined level, the attenuator attenuates the intensity of the input light so that unmodulated input light is not output from the modulator.

29. (CURRENTLY AMENDED) An apparatus comprising:

an optical modulator receiving an input light and modulating an the received input light in accordance with a modulation signal; and

means for attenuating intensity of the input light before being received by the optical modulator in accordance with intensity of the modulation signal.

30. (CURRENTLY AMENDED) An apparatus comprising:

an optical modulator modulating an input light in accordance with a modulation signal, to thereby output a modulated light; and

an attenuator, positioned downstream of the optical modulator, attenuating intensity of the modulated light output from the optical modulator in accordance with intensity of the modulation signal.

31. (PREVIOUSLY PRESENTED) An apparatus as in claim 30, wherein, when the intensity of the modulation signal is below a predetermined level, the attenuator attenuates the intensity of the modulated output light so that ASE is not output from the modulator to a downstream transmission line.

32. (PREVIOUSLY PRESENTED) An apparatus as in claim 30, wherein, when the intensity of the modulation signal is below a predetermined level, the attenuator attenuates the intensity of the modulated output light so that unmodulated input light is not output from the

modulator to a downstream transmission line.

33. (CURRENTLY AMENDED) An apparatus comprising:
an optical modulator modulating an input light in accordance with a modulation signal, to thereby output a modulated light; and
means, positioned downstream of the optical modulator, for attenuating intensity of the modulated light after being output from the optical modulator in accordance with intensity of the modulation signal.

34. (CURRENTLY AMENDED) A method comprising:
optically modulating an input light in accordance with a modulation signal; and
attenuating intensity of the input light, before the input light is optically modulated by said optically modulating, in accordance with intensity of the modulation signal.

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35. (PREVIOUSLY PRESENTED) A method as in claim 34, wherein, when the intensity of the modulation signal is below a predetermined level, said attenuating attenuates the intensity of the input light so that ASE is not output from said optically modulating.

36. (PREVIOUSLY PRESENTED) An apparatus as in claim 34, wherein, when the intensity of the modulation signal is below a predetermined level, said attenuating attenuates the intensity of the input light so that unmodulated input light is not output from said optically modulating.

37. (CURRENTLY AMENDED) A method comprising:
optically modulating an input light in accordance with a modulation signal, to thereby output a modulated light; and
attenuating, at a point downstream of said optical modulating, intensity of the modulated light output from said optical modulating in accordance with intensity of the modulation signal.

38. (PREVIOUSLY PRESENTED) A method as in claim 37, wherein, when the intensity of the modulation signal is below a predetermined level, said attenuating attenuates the intensity of the modulated output light so that ASE is not output from said optically modulating to a downstream transmission line.

39. (PREVIOUSLY PRESENTED) An apparatus as in claim 37, wherein, when the intensity of the modulation signal is below a predetermined level, said attenuating attenuates the intensity of the modulated output light so that unmodulated input light is not output from said optically modulating to a downstream transmission line.

40. (NEW) An apparatus comprising:

an optical modulator modulating an input light in accordance with a modulation signal; and

an attenuator attenuating intensity of the input light in accordance with intensity of the modulation signal, wherein, when the intensity of the modulation signal is below a predetermined level, the attenuator attenuates the intensity of the input light so that ASE is not output from the modulator.

41. (NEW) An apparatus comprising:

an optical modulator modulating an input light in accordance with a modulation signal; and

an attenuator attenuating intensity of the input light in accordance with intensity of the modulation signal, wherein, when the intensity of the modulation signal is below a predetermined level, the attenuator attenuates the intensity of the input light so that unmodulated input light is not output from the modulator.

42. (NEW) An apparatus comprising:

an optical modulator modulating an input light in accordance with a modulation signal, to thereby output a modulated light; and

an attenuator attenuating intensity of the modulated light output from the optical modulator in accordance with intensity of the modulation signal, wherein, when the intensity of the modulation signal is below a predetermined level, the attenuator attenuates the intensity of the modulated output light so that ASE is not output from the modulator to a downstream transmission line.

43. (NEW) An apparatus comprising:

an optical modulator modulating an input light in accordance with a modulation signal, to

thereby output a modulated light; and

an attenuator attenuating intensity of the modulated light output from the optical modulator in accordance with intensity of the modulation signal, wherein, when the intensity of the modulation signal is below a predetermined level, the attenuator attenuates the intensity of the modulated output light so that unmodulated input light is not output from the modulator to a downstream transmission line.

44. (NEW) A method comprising:

optically modulating an input light in accordance with a modulation signal; and
attenuating intensity of the input light in accordance with intensity of the modulation signal, wherein, when the intensity of the modulation signal is below a predetermined level, said attenuating attenuates the intensity of the input light so that ASE is not output from said optically modulating.

45. (NEW) A method comprising:

optically modulating an input light in accordance with a modulation signal; and
attenuating intensity of the input light in accordance with intensity of the modulation signal, wherein, when the intensity of the modulation signal is below a predetermined level, said attenuating attenuates the intensity of the input light so that unmodulated input light is not output from said optically modulating.

46. (NEW) A method comprising:

optically modulating an input light in accordance with a modulation signal, to thereby output a modulated light; and

attenuating intensity of the modulated light output from said optical modulating in accordance with intensity of the modulation signal, wherein, when the intensity of the modulation signal is below a predetermined level, said attenuating attenuates the intensity of the modulated output light so that ASE is not output from said optically modulating to a downstream transmission line.

47. (NEW) A method comprising:

optically modulating an input light in accordance with a modulation signal, to thereby output a modulated light; and

attenuating intensity of the modulated light output from said optical modulating in accordance with intensity of the modulation signal, wherein, when the intensity of the modulation signal is below a predetermined level, said attenuating attenuates the intensity of the modulated output light so that unmodulated input light is not output from said optically modulating to a downstream transmission line.

48. (NEW) An apparatus comprising:

an optical modulator having in input port and an output port, the optical modulator receiving a light at the input port, optically modulating the received light in accordance with a modulation signal, and outputting the modulated light from the output port; and

an attenuator, positioned before the input port or after the output port, attenuating intensity of the light in accordance with intensity of the modulation signal.

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49. (NEW) An apparatus as in claim 48, further comprising:

a detector detecting intensity of the modulation signal, wherein the attenuator attenuates the intensity of the light in accordance with the intensity of the modulation signal as detected by the detector.

50. (NEW) An apparatus as in claim 48, further comprising:

means for controlling the attenuator to attenuate the intensity of the light in accordance with the intensity of the modulation signal.

51. (NEW) An apparatus as in claim 49, further comprising:

means for controlling the attenuator to attenuate the intensity of the light in accordance with the intensity of the modulation signal as detected by the detector.

52. (NEW) An apparatus comprising:

an optical modulator having in input port and an output port, the optical modulator receiving a light at the input port, optically modulating the received light in accordance with a modulation signal, and outputting the modulated light from the output port;

a variable attenuator, positioned before the input port to attenuate intensity of the light before being received at the input port, or positioned after the output port to attenuate

intensity of the light after being output as modulated light from the output port;
a detector detecting intensity of the modulation signal; and
a controller controlling the attenuator to attenuate the intensity of the light in accordance with the detected intensity of the modulation signal.

53. (NEW) An apparatus comprising:

modulation means, having in input port and an output port, for receiving a light at the input port, for optically modulating the received light in accordance with a modulation signal, and for outputting the modulated light from the output port;

attenuator means, positioned before the input port to attenuate intensity of the light before being received at the input port, or positioned after the output port to attenuate intensity of the light after being output as modulated light from the output port;

means for detecting intensity of the modulation signal; and

means for controlling the attenuator means to attenuate the intensity of the light in accordance with the detected intensity of the modulation signal.
